

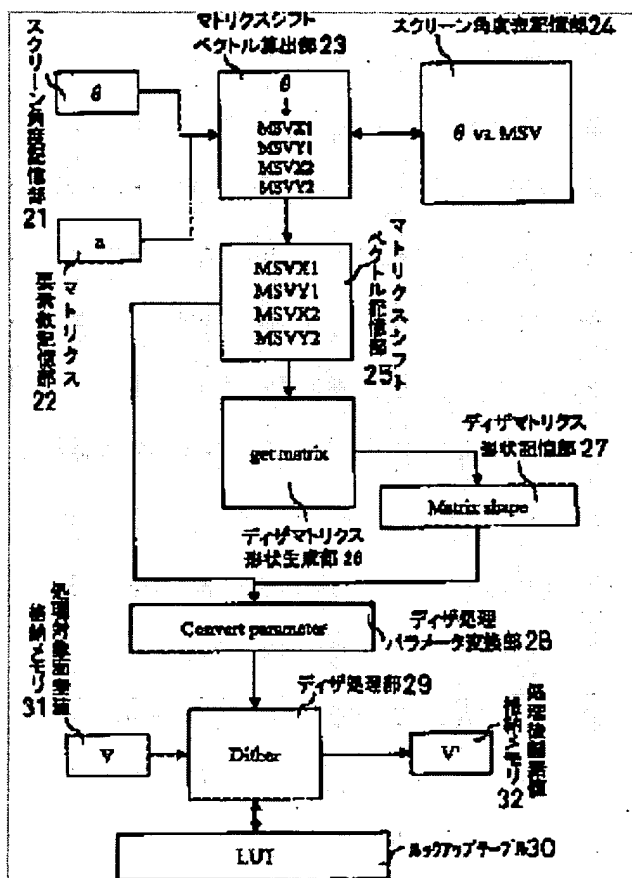
# IMAGE PROCESSING APPARATUS, IMAGE FORMING APPARATUS, IMAGE PROCESSING METHOD, IMAGE PROCESSING PROGRAM AND RECORDING MEDIUM

**Patent number:** JP2003348346  
**Publication date:** 2003-12-05  
**Inventor:** YOSHIDA AKITO  
**Applicant:** SHARP KK  
**Classification:**  
 - international: H04N1/405; B41J2/52; G06T5/00; H04N1/52  
 - european:  
**Application number:** JP20020153001 20020527  
**Priority number(s):** JP20020153001 20020527

## Abstract of JP2003348346

**<P>PROBLEM TO BE SOLVED:** To provide an image processing apparatus, an image forming apparatus provided with the image processing apparatus, an image processing method, an image processing program and a recording medium with the image processing program recorded thereon in which dither processing of high reproducibility having smooth gradations is performed when reproducing an image from circular, elliptical and diamond-shaped dots of screen angle 45 [deg.] by generating a suitable dither matrix shape corresponding to the screen angle.

**<P>SOLUTION:** A matrix shift vector calculating part 23 reads out a screen angle [theta] stored in a screen angle storage part 21 beforehand and a matrix element number (n) stored in a matrix element number storage part 22 beforehand and calculates two matrix shift vectors based upon an angle table stored in a screen angle table storage part 24. Based upon the calculated two matrix shift vectors, a dither matrix shape generating part 26 generates the dither matrix shape within a range of a parallelogram formed by the two matrix shift vectors. **<P>COPYRIGHT:** (C) 2004,JPO



Data supplied from the esp@cenet database - Worldwide